



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	j Fi	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/075,338	(	02/14/2002	Michael L. Reed	10186	8708	
26890	7590	11/03/2005		EXAMINER		
JAMES M			DANG, THANH HA T			
NCR CORP 1700 SOUT		N RSON BLVD, WHQ		ART UNIT	PAPER NUMBER	
DAYTON,			2163			

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicat	on No.	Applicant(s)			
		10/075,3	38	REED ET AL.			
Office Action Summary		Examine	<u>r</u>	Art Unit			
	•	Thanh-H	a Dang	2163			
Period f	The MAILING DATE of this communion Reply	cation appears on th	e cover sheet with the	e correspondence address			
A SH THE - Exte after - If th - If NO - Failt Any	MAILING DATE OF THIS COMMUNION OF THE COMMUNION OF TH	CATION. of 37 CFR 1.136(a). In no eventication. of systam and vibration and vibration period will apply and vivill, by statute, cause the apply.	vent, however, may a reply be tutory minimum of thirty (30) o vill expire SIX (6) MONTHS fr olication to become ABANDO	e timely filed  days will be considered timely.  om the mailing date of this communication.  NED (35 U.S.C. § 133).			
Status			·				
1)🛛	Responsive to communication(s) filed	d on <u>07/22/05</u> .		•			
·	•	tb)∐ This action is i	non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)□ 6)⊠ 7)⊠	Claim(s) 1-44 is/are pending in the all 4a) Of the above claim(s) is/are Claim(s) is/are allowed.  Claim(s) 1.2.4-20.22-36 and 38-44 is Claim(s) 3.21 and 37 is/are objected Claim(s) are subject to restrict	e withdrawn from co /are rejected. to.					
Applicat	ion Papers		•				
10)⊠	The specification is objected to by the The drawing(s) filed on <u>14 February 2</u> Applicant may not request that any object Replacement drawing sheet(s) including The oath or declaration is objected to	<u>2002</u> is/are: a)⊠ action to the drawing(s) the correction is requi	be held in abeyance. Sired if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).			
Priority (	under 35 U.S.C. § 119						
a)	Acknowledgment is made of a claim f  All b) Some * c) None of:  1. Certified copies of the priority of  3. Copies of the certified copies of application from the Internation  See the attached detailed Office action	documents have been documents have been for the priority documnal Bureau (PCT Ru	en received en received in Applic ents have been rece le 17.2(a)).	ation No ived in this National Stage			
Attachmen	• •						
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PT	ro-948)	4) Interview Summa Paper No(s)/Mail	ıry (PTO-413) Date			
3) 🔲 Infor	mation Disclosure Statement(s) (PTO-1449 or Fer No(s)/Mail Date			Patent Application (PTO-152)			

، فيجشد

#### **DETAILED ACTION**

1. Claims 1-2, 4-20, 22-36, and 38-44 are rejected in this Office Action.

Claims 3, 21, and 37 are objected in this Office Action.

2. This Action is made Final.

corresponding to the link).

## Response to Arguments

3. Applicant's arguments filed July 22, 2005 have been fully considered but they are not persuasive. Examiner respectfully maintains the rejection cited for the following reasons:

• Applicant argues: Applicant states in page 9 with respect to Claims 1, 19 and 43 that the Lee patent does not show receiving "an insert request to insert data into", "where the insert request includes one or more links", "indicates a server connection and a storage location for data corresponding to the link". Examiner responds: Examiner is not persuaded. Lee discloses receiving "an insert request to insert data into" (Figure 11 wherein block608 illustrates insert request to insert data), "where the insert request includes one or more links" (Figure 11 wherein block608 illustrates the insert request includes one or more links, column 9, lines 55-56, column 10, lines 9-22), "indicates a server

connection and a storage location for data corresponding to the link" (Figures

1 and 2 illustrate a server connection and a storage location for data

Art Unit: 2163

Applicant argues: Applicant states in page 10 with respect to Claim 13 that

Page 3

Lee does not show the elements of Claim 13.

Examiner responds: Examiner is not persuaded. Lee teaches the elements of

Claim 13 in Figures 6-13, wherein block488 illustrates the links corresponding

to a respective member of a field in an entry in a table in a database system,

column 8, lines 12-35; and in Figures 7, 11-12 illustrate providing a request to

the database system to load data into the table, where the request includes

the obtained links, column 8, lines 36-48.

Applicant argues: Applicant states in page 10 with respect to Claim 31 that

Lee does not show a database system that receives requests that include

links.

Examiner responds: Examiner is not persuaded. Lee teaches the elements of

Claim 31: in Figure 1, wherein block16 is a data storage facilities for use in

storing data records in tables of a database which is block20, column 3, lines

63-67 and column 4, lines 1-15; in Figure 4, wherein block130, block136,

block140, block146 represent the processing modules configured to manage

the data stored in the data-storage facilities, column 6, lines 4-35, and column

7, lines 3-34; and in Figure 6-13 illustrate a database management

component which load data using one or more links received in a request

from a client system via a server connection and a storage location

corresponding to the link, column 8, lines 65-67, column 9, lines 1-67 and

column 10, lines 1-43.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-20, 22-36, and 38-44 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No 6,839,707 issued to Lee et al. ("Lee").

As to Claim 1, Lee teaches "a method of loading data into a database system, comprising:

- receiving an insert request to insert data into a table in a database system,
   where the insert request includes one or more links, and each link
   indicates a server connection and a storage location for data
   corresponding to the link" (Figures 11, 17-18, column 11, lines 12-40);
- "creating a table entry in the database system" (Figure 3, column 5, lines 3-9);
- "opening the corresponding server connection for each received link" (column 8, lines 12-35);

Art Unit: 2163

 "requesting the data corresponding to each received link through the corresponding opened server connection" (Figures 9-13, column 8, lines

66-67, column 9, lines 1-67 and column 10, lines 1-43);

Page 5

- "receiving the requested data for each received link through the corresponding server connection" (Figures 9-13, column 8, lines 66-67, column 9, lines 1-67 and column 10, lines 1-43); and
- "storing the received data in the table entry" (Figure 11, wherein block594
  has an equivalent representation to a table which stores the received data
  in the accessed table entry, column 9, lines 21-23).

As to Claim 2, Lee teaches:

- "selecting a data storage facility within the database system to store the
  data indicated by the insert request" (Figures 10-11, wherein block564 and
  block608 allow selecting a data storage facility within the database system
  to store the data indicated by the insert request, column 9, lines 24-64);
  and
- "passing the insert request to a database worker task within a processing module associated with the selected data storage facility" (Figures 11-12, wherein block608 and block640 and/or block642 execute the passed insert request to a database worker task within a processing module associated with the selected data storage facility, column 9, lines 44-67 and column 10, lines 1-22).

٦,

As to Claim 4, Lee teaches "the table entry includes a field of a user defined type and the received data is stored in a user defined type object representing the user defined type field" (column 10, lines 9-22).

As to **Claim 5**, Lee teaches "at least one link is a URL" (Figure 2, column 4, lines 16-32).

As to Claim 6, Lee teaches "at least one link is an ODBC DSN" (column 1, lines 57-59).

As to Claim 7, Lee teaches "the insert request includes a link string indicating the one or more links" (Figure 11, wherein block570 and block608 illustrate the insert request including a link string indicating the one or more links, column 9, lines 44-64).

As to Claim 8, Lee teaches "parsing the link string to derive each of the links" (Figure 11, wherein label586, label588 and the address-tab illustrate the link string to derive each of the links, column 9, lines 44-64).

As to Claim 9, Lee teaches "opening the corresponding server connection includes opening a connection across the Internet" (Figure 2, column 4, lines 16-32).

As to Claim 10, Lee teaches "storing at least some of the received data in a large object database related to the database system" (Figure 3, column 4, lines 66-67 and column 5, lines 1-23).

Art Unit: 2163

Page 7

As to Claim 11, Lee teaches "passing the received links to a link constructor" (Figures 11-12, wherein block608 and block644 pass the received links to a link constructor, column 9, lines 55-64 and column 10, lines 10-22).

As to **Claim 12**, Lee teaches "the link constructor creates the table entry, opens appropriate server connections, requests and receives data through opened server connections, and stores the received data in the created table entry" (Figures 11-12, column 10, lines 37-43).

As to Claim 13, Lee teaches "a method of loading data into a database system, comprising:

- obtaining one or more links, where each link corresponds to a respective member of a field in an entry in a table in a database system and to data to be stored for the corresponding field, and each link indicates a server connection and a storage location for the corresponding data" (Figures 9-13, wherein block488 illustrates the links corresponding to a respective member of a field in an entry in a table in a database system, column 8, lines 12-23); and
- "providing a request to the database system to load data into the table,
   where the request includes the obtained links" (Figure 7, column 8, lines 36-48).

As to **Claim 14**, Lee teaches "the request is an insert request" (Figure 11, column 9, lines 44-61).

As to **Claim 15**, Lee teaches "the request is an update request" (Figure 11, column 9, lines 44-61).

As to **Claim 16**, Lee teaches "creating a link string including each of the obtained links, and where the request includes the link string" (Figure 11, wherein label586, label588 and the address-tab illustrate the link string to derive each of the links, column 9, lines 44-64 and column 10, lines 37-43).

As to **Claim 17**, Lee teaches "at least one link is a URL" (Figure 2, column 4, lines 16-32).

As to Claim 18, Lee teaches "at least one link is an ODBC DSN" (column 1, lines 57-59).

As to **Claim 19**, Lee teaches "a computer program, stored on a tangible storage medium, for use in loading data into a database system, the program comprising executable instructions that cause a computer to:

- receive an insert request to insert data into a table in a database system,
   where the insert request includes one or more links, and each link
   indicates a server connection and a storage location for data
   corresponding to the link" (Figures 11, 17-18, column 11, lines 12-40);
- "create a table entry in the database system" (Figure 3, column 5, lines 3-9);
- "open the corresponding server connection for each received link" (column 8, lines 12-35);

Art Unit: 2163

 "request the data corresponding to each received link through the corresponding opened server connection" (Figures 9-13, column 8, lines 66-67, column 9, lines 1-67 and column 10, lines 1-43);

Page 9

- "receive the requested data for each received link through the corresponding server connection" (Figures 9-13, column 8, lines 66-67, column 9, lines 1-67 and column 10, lines 1-43); and
- "store the received data in the table entry" (Figure 11, wherein block594
  has an equivalent representation to a table which stores the received data
  in the accessed table entry, column 9, lines 21-23).

As to Claim 20, Lee teaches "executable instructions that cause a computer to:

- select a data storage facility within the database system to store the data
  indicated by the insert request" (Figures 10-11, wherein block564 and
  block608 allow selecting a data storage facility within the database system
  to store the data indicated by the insert request, column 9, lines 24-64);
  and
- "pass the insert request to a database worker task within a processing module associated with the selected data storage facility" (Figures 11-12, wherein block608 and block640 and/or block642 execute the passed insert request to a database worker task within a processing module associated with the selected data storage facility, column 9, lines 44-67 and column 10, lines 1-22).

٠.

As to Claim 22, Lee teaches "the table entry includes a field of a user defined type and the received data is stored in a user defined type object representing the user defined type field" (column 10, lines 9-22).

As to Claim 23, Lee teaches "at least one link is a URL" (Figure 2, column 4, lines 16-32).

As to Claim 24, Lee teaches "at least one link is an ODBC DSN" (column 1, lines 57-59).

As to **Claim 25**, Lee teaches "the insert request includes a link string indicating the one or more links" (Figure 11, wherein block570 and block608 illustrate the insert request including a link string indicating the one or more links, column 9, lines 44-64).

As to **Claim 26**, Lee teaches "executable instructions that cause a computer to parse the link string to derive each of the links" (Figure 11, wherein label586, label588 and the address-tab illustrate the link string to derive each of the links, column 9, lines 44-64).

As to Claim 27, Lee teaches "opening the corresponding server connection includes opening a connection across the Internet" (Figure 2, column 4, lines 16-32).

As to Claim 28, Lee teaches "executable instructions that cause a computer to store at least some of the received data in a large object database related to the database system" (Figure 3, column 4, lines 66-67 and column 5, lines 1-23).

As to Claim 29, Lee teaches "executable instructions that cause a computer to pass the received links to a link constructor" (Figures 11-12, wherein block608 and block644 pass the received links to a link constructor, column 9, lines 55-64 and column 10, lines 10-22).

As to **Claim 30**, Lee teaches "the link constructor creates the table entry, opens appropriate server connections, requests and receives data through opened server connections, and stores the received data in the created table entry" (Figures 11-12, column 10, lines 37-43).

As to Claim 31, Lee teaches "a database system, comprising:

- one or more data storage facilities for use in storing data composing records in tables of a database" (Figure 1, wherein block16 is a data storage facilities for use in storing data records in tables of a database which is block20, column 3, lines 63-67 and column 4, lines 1-15);
- "one or more processing modules configured to manage the data stored in the data-storage facilities" (Figure 4, wherein block130, block136, block140, block146 represent the processing modules configured to manage the data stored in the data-storage facilities, column 6, lines 4-35, and column 7, lines 3-34); and
- "a database management component configured to load data into the data storage facilities using one or more links received in a request from a client system, where each link indicates a server connection and a storage location for data corresponding to the link" (Figure 6-13 illustrates a

: .

database management component which load data using one or more links received in a request from a client system via a server connection and a storage location corresponding to the link, column 8, lines 65-67, column 9, lines 1-67 and column 10, lines 1-43).

As to Claim 32, Lee teaches "the request is an insert request" (Figure 11, column 9, lines 44-61).

As to **Claim 33**, Lee teaches "the request is an update request" (Figure 11, column 9, lines 44-61).

As to Claim 34, Lee teaches "the one or more data storage facilities store one or more objects of a user defined type for storing data loaded using links received in client requests" (Figures 10-13, column 10, lines 10-22).

As to Claim 35, Lee teaches "at least one processing module includes executable instructions providing a database worker task configured to:

- create a table entry in a data storage facility corresponding to the processing module including the database worker task" (Figure 3, column 5, lines 3-9);
- "open the corresponding server connection for each received link" (column
  8, lines 12-35);
- "request the data corresponding to each received link through the corresponding opened server connection" (Figures 9-13, column 8, lines 66-67, column 9, lines 1-67 and column 10, lines 1-43);

Art Unit: 2163

• "receive the requested data for each received link through the

corresponding server connection" (Figures 9-13, column 8, lines 66-67,

Page 13

column 9, lines 1-67 and column 10, lines 1-43); and

"store the received data in the table entry" (Figure 11, wherein block594)

has an equivalent representation to a table which stores the received data

in the accessed table entry, column 9, lines 21-23).

As to Claim 36, Lee teaches "the database management component is

further configured to:

select a data storage facility within the database system to store the data

indicated by the client request" (Figures 10-11, wherein block564 and

block608 allow selecting a data storage facility within the database system

to store the data indicated by the client request, column 9, lines 24-64);

and

"pass the client request to the database worker task within a processing

module associated with the selected data storage facility" (Figures 11-12,

wherein block608 and block640 and/or block642 execute the passed

insert request to a database worker task within a processing module

associated with the selected data storage facility, column 9, lines 44-67

and column 10, lines 1-22).

As to Claim 38, Lee teaches "at least one link is a URL" (Figure 2, column

4, lines 16-32).

€.

As to Claim 39, Lee teaches "at least one link is an ODBC DSN" (column 1, lines 57-59).

As to Claim 40, Lee teaches "at least one link indicates a server connection accessible to the database management component through the Internet" (Figure 2, column 4, lines 16-32).

As to Claim 41, Lee teaches "a large object database connected to the database management component" (Figure 3, column 4, lines 66-67 and column 5, lines 1-23).

As to Claim 42, Lee teaches "the database management component is further configured to store the received links and provide the stored links upon request" (Figure 14, column 10, lines 44-54 and column 11, lines 1-11).

As to **Claim 43**, Lee teaches "a method of loading data into a database system, comprising:

- receiving an update request to insert data into a table in a database system, where the insert request includes one or more links, and each link indicates a server connection and a storage location for data corresponding to the link" (Figures 11-12, wherein block598 and block646 execute the received update request to insert data into a table in a database system, column 9, lines 44-67 and column 10, lines 1-22);
- "accessing an existing table entry in the database system" (Figure 10, wherein block564 allows the user to access an existing entry in the database system, column 9, lines 24-43);

Art Unit: 2163

ř,

 "opening the corresponding server connection for each received link" (column 8, lines 12-35);

Page 15

- "requesting the data corresponding to each received link through the corresponding opened server connection" (Figures 9-13, column 8, lines 66-67, column 9, lines 1-67 and column 10, lines 1-43);
- "receiving the requested data for each received link through the corresponding server connection" (Figures 9-13, column 8, lines 66-67, column 9, lines 1-67 and column 10, lines 1-43); and
- "storing the received data in the accessed table entry" (Figure 11, wherein block594 has an equivalent representation to a table which stores the received data in the accessed table entry, column 9, lines 21-23).

As to Claim 44, Lee teaches:

- "selecting a data storage facility within the database system to store the
  data indicated by the update request" (Figures 10-11, wherein block564
  and block608 allow selecting a data storage facility within the database
  system to store the data indicated by the update request, column 9, lines
  24-64); and
- "passing the update request to a database worker task within a processing module associated with the selected data storage facility" (Figures 11-12, wherein block598 and block646 execute the received update request to insert data into a table in a database system, column 9, lines 44-67 and column 10, lines 1-22).

Application/Control Number: 10/075,338 Page 16

Art Unit: 2163

## Allowable Subject Matter

5. Claims 3, 21 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not teach or fairly suggest:

- At least two insert requests are processed in parallel as recited in Claim 3.
- At least two insert requests are processed in parallel as recited in Claim
   21.
- The database management component is further configured to process at least two client requests including link strings in parallel as recited in Claim 37.

٠

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2163

Contact Information

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Thanh-Ha Dang whose telephone number is

571-272-4033. The examiner can normally be reached on Monday-Friday from

9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax

phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free).

Thanh-Ha Dang RCR Examiner Examiner

Art Unit 2163

SAFET METJAHIC SUPERVISORY PATENT EXAMINER

Page 18

TECHNOLOGY CENTER 2100